Recombinant Human MCM3, GST-tagged

Cat. No. MCM3-23H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human MCM3(699 a.a. - 808 a.a.), fused with GST-tag at N-terminal, was expressed in wheat germ.
Species	Human
Source	Wheat Germ
Description	The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. This protein is a subunit of the protein complex that consists of MCM2-7. It has been shown to interact directly with MCM5/CDC46. This protein also interacts with and is acetylated by MCM3AP, a chromatin-associated acetyltransferase. The acetylation of this protein inhibits the initiation of DNA replication and cell cycle progression. Two transcript variants encoding different isoforms have been found for this gene.
Molecular Mass	37.84 kDa
AA Sequence	AKDGDSYDPYDFSDTEEEMPQVHTPKTADSQETKESQKVELSESRLKAFKVALLDV FREAHAQSIGMNRLTESIN RDSEEPFSSVEIQAALSKMQDDNQVMVSEGIIFLI
Applications	ELISA; WB-Re; AP; Array

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Notes	Best use within three months from the date of receipt of this protein.
Storage	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

GENE INFORMATION

Gene Name	MCM3 minichromosome maintenance complex component 3 [Homo sapiens]
Official Symbol	MCM3
Synonyms	MCM3; minichromosome maintenance complex component 3; HCC5; P1.h; RLFB; P1-MCM3; DNA replication licensing factor MCM3; p102; RLF subunit beta; hRlf beta subunit; DNA replication factor MCM3; cervical cancer proto-oncogene 5; minichromosome maintenance deficient 3; replication licensing factor, beta subunit; replication licensing factor, beta subunit; DNA polymerase alpha holoenzyme-associated protein P1; NP_001257401.1; EC 3.6.4.12; NP_002379.3
Gene ID	4172
mRNA Refseq	NM_002388
Protein Refseq	NP_002379
MIM	602693
UniProt ID	P25205
Chromosome Location	6p12

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Pathway	Activation of ATR in response to replication sress; DNA Replication; E2F transcription factor network; G2/M Checkpoints
Function	ATP binding; DNA binding; DNA helicase activity; protein binding

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